

ABSTRACT

Sub B2
Apparatus and method of detecting assayed molecules in a sample make use of a sensing member comprising a piezoelectric crystal with a sensing surface that can interact with a medium in contact therewith by either binding a first indicator agent from the medium, or by releasing a second indicator agent originally immobilized on the sensing surface into the medium. The binding or release causes a change in mass detectable by the use of an electric or electronic utility, through a change in resonance frequency. The medium interacting with the sensing member is treated sample preparation obtained by reacting the sample with one or both of a reagent solution or sample-processing hardware, such that said medium comprises a first indicator agent or a second indicator agent-releasing species at a concentration of said agent or species which is in correlation to the concentration of the assayed molecules in the sample.